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FILE 'CA' ENTERED AT 07:45:29 ON 05 APR 2002

L1 47289 S AMPEROMET? OR COTTRELL OR (SENSOR OR DETECTOR OR BIOSENSOR OR
MICROSENSOR) (L) (ELECTRODE OR MICROELECTRODE) OR CONDUCTOMET?
L2 4010 S L1 AND (NOISE OR INTERFER?)
L3 1729 S L1 AND (PREVENT? OR PROTECT? OR BLANK? OR CANCEL? OR COMPENSAT? OR
REDUC? OR ELIMINAT? OR ELLIMINAT?) (6A) (CIRCUIT OR ELECTRODE OR
MICROELECTRODE)
L4 261 S L2 AND L3
L5 13 S L3 AND (ELECTROMAGN? OR RF OR RADIO FREQUENCY)
L6 3 S L3 AND SIMPLIFIED/TI
L7 273 S L4-6

=> d 17 bib, ab 1-273

L7 ANSWER 6 OF 273 CA COPYRIGHT 2002 ACS

AN 135:352098 CA

TI Electrochemical sensor for determining analyte in the presence of
interferent

IN Saffell, John R.; Hitchman, Michael L.; Dawson, Darryl H.

PA Alphasense Limited, UK

SO Eur. Pat. Appl., 20 pp.

PI EP 1154267 A2 20011114 EP 2001-304285 20010514

PRAI GB 2000-11511 A 20000513

AB Electrochem. sensor for detg. analyte in the presence of interferent,
particularly carbon monoxide in the presence of hydrogen. An electrochem.
cell is designed so that current flow resulting from ref. electrode
potential shift caused by interferent cancels out the current flow caused
by interferent at the working electrode. Another electrochem. cell
corrects for interferent concn. using the p.d. between a ref. electrode in
contact with interferent and a ref. electrode not affected by interferent.

L7 ANSWER 15 OF 273 CA COPYRIGHT 2002 ACS

AN 135:134159 CA

TI Stationary-state oxidized platinum microsensor for selective and on-line
monitoring of nitric oxide in biological preparations

AU Cserey, Andrea; Gratzl, Miklos

CS Department of Biomedical Engineering and Department of Physiology and
Biophysics, Case Western Reserve University, Cleveland, OH, 44106, USA

SO Analytical Chemistry (2001), 73(16), 3965-3974

AB Despite the multifaceted biomedical significance of NO, little progress has
been achieved so far in the quant. understanding of the signal transduction
mechanisms where NO is involved. To help progress in this area, we propose
a simple electrochem. NO sensor here, consisting of a glass sealed platinum
microdisk electrode coated with cellulose acetate to reduce both surface
fouling by proteins and response to potential interferences. A
differential amperometry protocol is optimized to improve selectivity and
provide a stationary oxidn. state of the platinum surface, which prevents
loss in sensitivity during long-term use. We found the oxidn. of NO by O₂
second order in [NO] with a rate const. of $(8.0 \pm 0.4) \times 10^6 \text{ M}^{-2} \text{ s}^{-1}$, in good
agreement with literature data obtained by other than electrochem. methods.
The release rates of NO detected in cultures of activated macrophages were
on the order of 20 pmol/(106 cells s) and correlated well with the nitrite
content detd. by the spectrophotometric Griess assay.

L7 ANSWER 17 OF 273 CA COPYRIGHT 2002 ACS

AN 135:104420 CA
 TI Multiparameter miniaturized sensor arrays for multiple use
 AU Ritter, C.; Heike, F.; Herbert, K.; Josef, K. F.; Susanne, L.; Christian, N.; Helmut, O.; Gabriele, P.; Bernhard, S.; Marieluise, S.; Wolfgang, S.; Gregor, S.
 CS Roche Diagnostics GmbH, Graz, A-8020, Austria
 SO Sensors and Actuators, B: Chemical (2001), B76(1-3), 220-225
 AB A family of electrochem. thick film sensors is presented which are suitable for different applications but are esp. designed for the use in biol. fluids. One sensor unit typically contains 4-6 different sensors for different analytes. The sensors show a fast response time of <30 s and a lifetime of up to several thousand samples. The sensors are maintenance free and exhibit good selectivity which can be increased by integrated interference compensation electrodes. Sensors for the following analytes have been developed to a stage where most of them are ready to use: sodium, potassium, ionized calcium, ionized magnesium, chloride, pH, pO₂, pCO₂, glucose, lactate, urea, creatinine.

L7 ANSWER 21 OF 273 CA COPYRIGHT 2002 ACS
 AN 134:320214 CA
 TI Elimination of High-Voltage Field Effects in End Column Electrochemical Detection in Capillary Electrophoresis by Use of On-Chip Microband Electrodes
 AU Klett, Oliver; Bjoerefors, Fredrik; Nyholm, Leif
 CS Department of Analytical Chemistry, Uppsala University, Uppsala, 751 21, Swed.
 SO Analytical Chemistry (2001), 73(8), 1909-1915
 AB The influence of the sepn. voltage on end column electrochem. detection (EC) in capillary electrophoresis (CE) was studied using an electrochem. detector chip based on an array of microband electrodes. It is shown, both theor. and exptl., that the effect of the CE elec. field on the detection can be practically eliminated, without using a decoupler, by positioning the ref. electrode sufficiently close to the working electrode. This was demonstrated by using an exptl. setup in which neighboring microband electrodes on a chip, positioned 30 µm from the end of the CE capillary, were used as working and ref. electrodes, resp. The short distance (i.e., 10 µm) between the working and ref. electrode ensured that both of the electrodes were very similarly affected by the presence of the CE elec. field. With this exptl. setup, no significant influence of the CE voltage on the peak potentials for Au oxide redn. could be seen for CE voltages up to +30 kV. The detector noise level also is reduced.

L7 ANSWER 44 OF 273 CA COPYRIGHT 2002 ACS
 AN 131:269253 CA
 TI Method for determining the concentration of a substrate in a sample solution with a biosensor
 IN Ikeda, Shin; Yoshioka, Toshihiko; Nankai, Shiro
 PA Matsushita Electric Industrial Co., Ltd., Japan
 SO PCT Int. Appl., 34 pp.
 PI WO 9951974 A1 19991014 WO 1999-JP1706 19990331
 US 6340428 B1 20020122 US 1999-424715 19991129
 PRAI JP 1998-13957 A 19980127
 AB A method is described for detg. the concn. of a substrate (e.g., glucose) in a sample soln. with an improved biosensor. The biosensor comprises an electrode system including a working electrode and a counter electrode both provided on an elec. insulating base, and a reaction layer contg. an oxidoreductase, an electron carrier and hydrophilic polymer provided on the electrode system. Then, the reduced amt. of electron carrier produced by

an enzyme reaction in the reaction layer is electrochem. measured. In this sensor system, a third electrode for detecting interfering substances is installed sep. from the reaction layer, and the supply of a sample soln. is detected by an elec. change between the counter electrode and the third electrode. The current generated between the counter electrode and the third electrode is measured and used as a pos. error. Then, the application of voltage between the counter electrode and the third electrode is canceled, and a voltage for oxidizing the reductant of the electron carrier is applied between the working electrode and the counter electrode to measure the current generated between both electrodes. This method is hardly influenced by interfering substances such as easily oxidized substances, and therefore, provides a highly reliable value for substrate detn. The interfering effect of ascorbic acid on the detn. of glucose was eliminated by this method with the glucose sensor constructed by using glucose oxidase as an enzyme, potassium ferricyanide as an electron carrier, and CM-cellulose as hydrophilic polymer. The supply of a sample soln. to the reaction layer was further facilitated by forming a lecithin layer on the reaction layer.

L7 ANSWER 52 OF 273 CA COPYRIGHT 2002 ACS
AN 131:43734 CA
TI Estimation of lactate in meat extracts by screen-printed sensors
AU Hart, A. L.; Matthews, C.; Collier, W. A.
CS Private Bag 11008, Ag Research Grasslands, Palmerston North, N. Z.
SO Anal. Chim. Acta (1999), 386(1-2), 7-12
AB Various facets of sensor technol.: platinum dispersed on carbon, a second "blank" working electrode, polymer matrixes for enzymes and diffusion-limiting membranes, were integrated using screen-printing to produce lactate sensors. The enzyme was lactate oxidase. The polymer matrixes were hydroxyethyl cellulose, GafQuat/lactitol and hydroxyethyl cellulose/polyethylenimine. The outer membrane was of known compn.: polyvinyl chloride co-polymer/cellulose acetate butyrate. When the sensors were mounted in a flow injection analyzer, ests. were obtained of the lactate concn. in simple buffer exts. of cattle meat. The most accurate ests. were obtained from sensors in which the enzyme was embedded in a matrix of GafQuat/lactitol or hydroxyethyl cellulose/polyethylenimine. The currents generated by the enzyme in the matrixes contg. GafQuat or polyethylenimine were higher than when hydroxyethyl cellulose alone was used as a matrix. The activity of the sensors under dry storage (over silica gel at 25°C) varied over eight months, but remained at a functional level. Every step in these relatively simple sensors was achieved by screen-printing; the use of a "blank" working electrode avoided the necessity of addnl. layers or membranes to reject interferents and the flow injection analyzer provided a const. hydrodynamic environment for sensor function.

L7 ANSWER 69 OF 273 CA COPYRIGHT 2002 ACS
AN 129:71834 CA
TI Chronoamperometric determination of hydrogen peroxide in swimming pool water using an ultramicroelectrode array
AU Schwake, A.; Ross, B.; Cammann, K.
CS Institut Chemo- und Biosensorik e.V., Munster, D-48149, Germany
SO Sens. Actuators, B (1998), B46(3), 242-248
AB Ultramicroelectrode arrays have been applied for monitoring the disinfectant H2O2 in swimming pool water. The sensors were manufd. using silicon thin-film technol. Each consisted of 9 miniaturized Pt working electrodes connected in parallel. A Pt counter electrode and a Ag/Ag chloride ref. electrode completed the measuring setup. The

ultramicroelectrode arrays were characterized by cyclic voltammetry and chronoamperometry. The sensor properties could be improved and the interfering influence of the swimming pool water matrix was reduced by covering the working electrodes of the arrays with NAFION membranes. A comparison of the introduced chronoamperometric method using the ultramicroelectrode array with the German std. method (DIN) for the H₂O₂ detn. showed that the accuracy of the NAFION coated sensors is suitable for monitoring and controlling the H₂O₂ concn. in swimming pool waters.

L7 ANSWER 79 OF 273 CA COPYRIGHT 2002 ACS

AN 128:30474 CA

TI Monitoring of blood catecholamines by microdialysis and microbore LC with a dual amperometric detector

AU Wu, Yuh-Shen; Ho, Wai-Meng; Tsai, Tung-Hu; Yang, Lin-Lan; Kuo, Jon-Son; Cheng, Fu-Chou

CS Department of Industrial Safety and Hygiene, Hung-Kuang Junior College of Nursing and Medical Technology, Taichung, 433, Taiwan

SO J. Pharm. Biomed. Anal. (1997), 16(1), 77-85

AB The accuracy of in vivo microdialysis for monitoring blood catecholamines and their metabolites in Lan-Yu mini-pigs was evaluated. To prevent blood clots and irritation, a microdialysis probe was secured in a Y-shaped tube. The tube was connected to an arterio-venous shunt, in a mini-pig, for in vivo expts. Perfusates were injected onto a microbore LC equipped with a dual electrochem. detector (the upstream electrode was set at an oxidizing potential and the downstream electrode was set at a reducing potential). The typical large offscale peak or interfering peaks on the anodic chromatograms were mostly eliminated on the cathodic chromatograms, thereby providing reliable measurements of early eluters. Early eluates, such as norepinephrine and epinephrine, with reversible redox behavior could be detected at the downstream reducing electrode. A comparison of the present method and a conventional blood-drawing method showed good correlation ($r = 0.775-0.983$ for all analytes).

L7 ANSWER 84 OF 273 CA COPYRIGHT 2002 ACS

AN 127:187861 CA

TI Glucose biosensor for home diagnosis of diabetes mellitus using saliva

IN Minami, Shigetoshi

PA Casio Computer Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

PI JP 09201337 A2 19970805 JP 1996-33014 19960125

AB The glucose (I) biosensor comprises (1) a 1st electrode on which enzyme capable of reducing I is immobilized, (2) an enzyme-free 2nd electrode, (3) a means which compensates the effect of interferences upon applying 1st ref. voltage lower than the redn. potential of I between the 1st and 2nd electrodes, and (4) a means which calcs. the concn. of I upon applying 2nd ref. voltage higher than the redn. potential of I between the 1st and 2nd electrodes. The sensor enables patients to easily det. blood sugar by measuring concn. of I in saliva without any special knowledge.

L7 ANSWER 89 OF 273 CA COPYRIGHT 2002 ACS

AN 126:327599 CA

TI Development of an amperometric immunosensor based on flow injection analysis for the detection of red blood cells

AU Lu, Bin; Smyth, Malcolm R.; O'Kennedy, Richard; Moulds, John; Frame, Tom

CS BEST Center, Dublin City Univ., Dublin, 9, Ire.

SO Anal. Chim. Acta (1997), 340(1-3), 175-180

AB An amperometric immunosensor, based on a non-competitive sandwich assay and flow injection anal. (FIA), was developed for the detection of human red

blood cells (RBCs). A dual working electrode, on which specific IgM and non-specific IgM were chem. immobilized to form sensing and blank electrodes, resp., was employed to det. the binding of specific blood cells and non-specific adsorption in one detn. Horseradish peroxidase (HRP)-labeled anti-blood group A IgM was used in the assay. Sensor prepn. involved chem. immobilization of the IgMs on glassy carbon electrodes using 1-ethyl-3(3-dimethyl aminopropyl)carbodiimide (EDC) as a coupling reagent in the presence of N-hydroxysuccinimide (NHS). The interference contributions, such as the non-specific adsorption of the enzyme conjugate and the blood cells, were detd. and removed. A quant. relation between the cell binding response and its concn. was obtained in the region $1-30 \times 10^8$ cells ml⁻¹.

L7 ANSWER 117 OF 273 CA COPYRIGHT 2002 ACS

AN 123:280138 CA

TI Direct and simultaneous determination of uric acid and glucose in serum with electrochemical filter/biosensor flow-injection analysis system

AU Okawa, Yusuke; Kobayashi, Hiroyuki; Ohno, Takashi

CS Faculty of Engineering, Chiba University, 1-33 Yayoi-cho, Inage-ku, Chiba-shi, Chiba, 263, Japan

SO Anal. Chim. Acta (1995), 315(1-2), 137-43

AB A flow-through electrolysis cell, named an electrochem. filter (ECF), with a three-electrode configuration was developed for the elimination and detn. of electrochem. active components in biofluids, which give generally a nonspecific response to electrochem. biosensors. The use of a ref. electrode ensured the precise control of the working electrode potential of the ECF and thus the quant. current efficiency of the electrolysis. A flow-injection anal. setup was constructed by connecting two ECFs and a flow-through amperometric biosensor for glucose in series for the direct and simultaneous detn. of glucose and uric acid in serum. The first ECF coulometrically detd. uric acid, and the second one eliminated interferences with the biosensor: the sample was thus treated on-the-fly and then delivered to the biosensor, so that it detd. glucose amperometrically without interference. The concns. of glucose and uric acid measured in human control sera agreed well with the values detd. with conventional methods. The system exhibited the wide dynamic range in the high glucose concn. region, thus can be applied to the anal. of serum of hyperglycemic patients.

L7 ANSWER 147 OF 273 CA COPYRIGHT 2002 ACS

AN 119:244957 CA

TI Organic charge-transfer complex crystal for biosensor

IN Kishimoto, Yoshihisa; Takano, Tetsuo

PA Sumitomo Metal Ind, Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

PI JP 05203608 A2 19930810 JP 1992-11346 19920124

AB The biosensor comprises a measuring electrode which is an enzyme electrode contg. an org. charge-transfer complex crystal, a counter electrode, and optionally a (nonenzymic) compensating electrode. The biosensor has good responsiveness and long life, requires no diln. or mixing of samples, is not affected by electrochem. interferences, and is simple and rapid and accurate. A biosensor contg. a measuring electrode coated with TCNQ (7,7',8,8'-tetracyanoquinodimethane) and also having immobilized glucose oxidase, a nonenzymic compensating electrode, and a counter electrode was prepd. for accurate glucose detn. in the presence or absence of ascorbic acid.

L7 ANSWER 156 OF 273 CA COPYRIGHT 2002 ACS

AN 119:24113 CA
TI Electrochemical measurement system having interference reduction circuit
for conductive fluid analysis
IN Gharib, James E.
PA Via Medical Corp., USA
SO PCT Int. Appl., 18 pp.
PI WO 9309433 A1 19930513 WO 1992-US9678 19921109
PRAI US 1991-790669 19911108
AB This invention relates to a system for elec. measuring certain chem.
characteristics of elec. conductive fluids, such as concn. of analytes
(e.g. ions, gases and metabolites) in blood and to elec. circuits for
reducing the effects of elec. interference in the measured system. The
measurements are made by measuring the potential between a ref. electrode
and a sensor electrode sensitive to a particular blood parameter such as pH
or Ca²⁺, K⁺, or Cl⁻ concn. A bypass path for the elec. current
interference is provided by a pair of noise-redn. electrodes located on
opposite sides of the ref. and sensor electrodes and interconnected by an
amplifier having a relatively low output impedance and a relatively high
input impedance. The elec. current interference bypasses the signal
electrodes by flowing directly into the amplifier's output terminal, such
that the ref. and sensor electrodes develop a potential between them that
is independent of the elec. current interference.

L7 ANSWER 172 OF 273 CA COPYRIGHT 2002 ACS
AN 115:78435 CA
TI A thick-film electrochemical instrument
AU Atkinson, J. K.; Shahi, S. S.; Varney, M.; Hill, N.
CS Dep. Electron. Comput. Sci., Univ. Southampton, Southampton, SO9 5NH, UK
SO Sens. Actuators, B (1991), B4(1-2), 175-81
AB A miniature electrochem. sensor fabricated as a printed thick-film
electrode assembly was interfaced to a thick-film hybrid circuit
potentiostat and voltage ramp generator to produce a portable instrument
for the anal. of trace elements in water. The electrode assembly consists
of an array of 200 μm square Au contacts in a planar construction with a
Ag/AgCl ref. electrode printed and fired onto an Al₂O₃ substrate. The
electrode assembly is interfaced via a thick-film hybrid circuit
potentiostat fabricated as a 28 pin dual in-line package (DIP); the
potentiostat, in turn, is controlled by a thick-film hybrid circuit voltage
ramp generator, also fabricated as a 28 pin DIP. Thick film hybrid circuit
modules reduce the susceptibility to extraneous noise sources. User-
configurable parameters include the sweep rate, polarity, and range of the
potential applied to the electrode assembly, together with the
amplification level of the potentiostat output signal. In this way it is
possible to use the instrument for a variety of measurements on the oxidn.
and redn. of trace elements in water. The output signals of the instrument
are suitable for direct connection to a chart recorder for the prodn. of
voltammograms. Initial characterization of the complete instrument
included the measurement of dissolved O concns. in water.

L7 ANSWER 192 OF 273 CA COPYRIGHT 2002 ACS
AN 111:32853 CA
TI Noise reduction technique for electrochemical cells
IN Harman, John N., III
PA USA
SO PCT Int. Appl., 29 pp.
PI WO 8902593 A1 19890323 WO 1988-US2934 19880825
PRAI US 1987-90558 19870828
AB A method and app. are disclosed for the electrochem. detn. of an

electrochem. reactive substance in a fluid stream and for simultaneously detg. and subtracting from the current flow due to the reaction of the sought-for substance, current flow caused by non-Faradaic conditions and other non-sought-for electrochem. reactive substances. The sensor consists of a counter electrode, a sensing electrode, and a compensating electrode. The sensing electrode is biased to the concn. polarization potential of the sought-after substance while the compensating electrode is biased to a different potential sufficiently low to cause current flow between the counter electrode and the compensating electrode due to non-Faradaic phenomena and/or other electrochem. reactive substances which react below the potential of the sensing electrode. Circuitry is provided for subtracting the compensating electrode signal output from the sensing electrode signal output and the difference is a signal which represents the diffusion current flow due to the electrochem. reaction of the sought after substance.

L7 ANSWER 213 OF 273 CA COPYRIGHT 2002 ACS
 AN 104:48321 CA
 TI Apparatus for blood analysis
 IN Goto, Kazuhiko; Araki, Kazuhiro; Sakurai, Yoshihiro
 PA Matsushita Electric Works, Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 PI JP 60183546 A2 19850919 JP 1984-39364 19840229
 AB In an app. contg. a sample carrier flow path, an electrode for the detection of interfering substances, an electrode for the detn. of test compds. (both are positioned in the lower stream, a device for the calcn. of concns. of test compds. based on the elec. outputs from both electrodes and a display for the calcn. for blood anal., a bias switching circuit is installed to bias the interfering substance-detecting electrode and the test electrode to prevent deterioration of the sensor after prolonged use.

L7 ANSWER 219 OF 273 CA COPYRIGHT 2002 ACS
 AN 102:39130 CA
 TI Electrolyte analyzer with ion-selective electrode
 PA Hitachi, Ltd., Japan
 SO Jpn. Tokkyo Koho, 4 pp.
 PI JP 54119989 A2 19790918
 AB In an electrolyte analyzer in which the p.d. is measured between an ion-selective electrode, provided with an ion detector membrane, an electrode body contg. an internal soln., and an electrode wire immersed in the internal soln., and a ref. electrode in contact with the test soln., the above electrode body is shielded with an electroconductive material, the signal-carrying wire connected to the electrode is connected to 1 of the input terminals of a differential comparator, and the shielding wire connected to the above electroconductor material is attached to the 2nd input terminal of the differential comparator with the signal-carrying wire and shielding wire being twisted together. The noise level is lowered significantly and the measurement precision is improved.

L7 ANSWER 232 OF 273 CA COPYRIGHT 2002 ACS
 AN 98:154600 CA
 TI Electroanalytical measurement procedure and apparatus with error compensation
 IN Daroczy, Janos; Erdelyi, Janos; Havas, Jenő; Kecskes, Lajos; Muller, Henrik
 PA Radelkis Elektrokémiai Muszergyártó Szövetkezet, Hung.
 SO Hung. Teljes, 22 pp.
 PI HU 22805 O 19820628 HU 1981-758 19810326
 US 4430164 A 19840207 US 1982-353290 19820301

PRAI HU 1981-758

19810326

AB A novel system for error compensation in electrochem. (e.g. potentiometric) anal. is based on periodic short-circuiting of a part or certain parts of a measuring chain in order to obtain parameters necessary for the compensation of errors. Some of the advantages are: (1) monitoring the electrochem. parameters of the sensing and ref. electrodes during the measurements, (2) elimination of the errors related to the changes in the electrochem. parameters of the sensor, (3) adjustment is possible during the measurement itself, (4) elimination of the interference of the streaming potential, (5) minimization of the errors related to the diffusion potential, (6) improved accuracy of continuous measurements, (7) decreased anal. time, (8) decreased frequency of the necessary single- or double-point adjustments, and (9) elimination of the interference of the long-term electronic drift of the app.

L7 ANSWER 234 OF 273 CA COPYRIGHT 2002 ACS

AN 95:180092 CA

TI Electrochemical detectors in liquid chromatography. A short review of detector design

AU Weber, Stephen G.; Purdy, William C.

CS Dep. Chem., Univ. Pittsburgh, Pittsburgh, PA, 15260, USA

SO Ind. Eng. Chem. Prod. Res. Dev. (1981), 20(4), 593-8

AB Design criteria for the construction of electrochem. (amperometric and coulometric) detectors which operate in flowing streams are reviewed with 52 refs. Equations are given for the sensitivity of each electrode design as a function of the geometrical parameters (cell dimensions, electrode area) and phys. parameters (liq. flow rate, diffusion coeff., kinematic viscosity). The sensitivities of common detectors are similar; on the order of $0.5 \mu\text{A}/\mu\text{M}/1.0 \text{ cm}^2$ electrode area for a 1-electron oxidn. or redn. The use of multiple electrodes is discussed. Selectivity can be gained by using 2 electrodes operating at different potentials. Selectivity and increased precision result from using 1 electrode to oxidize or reduce the constituents of the flow stream while a second electrode downstream detects the products of the first electrode reaction. Practical points on the operation of the detector, esp. noise redn., are given.

L7 ANSWER 240 OF 273 CA COPYRIGHT 2002 ACS

AN 91:167910 CA

TI Electroanalytical cells and amperometric methods

IN Hale, John Martin; Weber, Eugen

PA Orbisphere Corp., Switz.

SO Ger. Offen., 47 pp.

PI DE 2851447 A1 19790726 DE 1978-2851447 19781128

GB 2013895 A 19790815 GB 1979-552 19790108

PRAI CH 1978-558 19780119

AB An electrochem. cell for the amperometric detn. of electroactive components, e.g. O, in fluids contains a membrane permeable to O but not to the electrolyte. The membrane seps. the fluid medium to be analyzed from the electrolyte. The cell contains also a working, a ref., and a protective electrode arranged in such a way that the protective electrode is held at a controlled potential to protect the surface of the working electrode from any undesirable current contributions which interfere in the amperometric detn.

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